For All Atari 8-Bit Computer Systems

MAGNIPRINT II+

ATARI SYSTEMS

BY JEFF BADER
(C) COPYRIGHT 1984

AN ALPHA SYSTEMS PRODUCT

This manual is soley for the use of the purchaser and no part of this manual may be reproduced in any way without prior written consent from Alpha Systems.

Atari is a registered trademark of Atari, Inc.

NOTICE: Portions of this product were produced using copyrighted software products of MONARCH DATA SYSTEMS, Cochituate, MA, 01778

ALPHA SYSTEMS
1012 SKYLAND DRIVE
MACEDONIA, OH. 44056

MAGNIPRINT II+

I. Introduction

Magniprint II+ is the latest step ahead in graphics printing. It offers new and enhanced features far beyond the capabilities of any other screen to printer dump utility on the market

This package prints all Atari graphics & text modes. It is extremely flexible with graphics modes 8 & 9, and ANTIC mode E (also known as 7.5), allowing multiple size printing, printing of selective areas of the picture, printing horizontally or vertically, in inverse or normal print, and large poster size printing. It even prints graphics mode E with 4 level shading, and graphics mode 9 with 16 level shading. Magniprint II+ is the only printing program fully compatible with ComputerEyes.

It also offers a small size "quick" print routine, multisize text addition to graphics modes 8, 7.5, and 9 screens, a touch-up mode to change pictures, color rotation for interesting visual effects, and expanded usage of pictures from other commercially available picture creating programs. Magniprint II+ has the ability to load alternate character sets, and to load and save pictures in Micro Illustrator format.

Your Magniprint II+ disk also contains a bonus program, Print All, which allows you to print your BASIC programs or files showing all inverse and Atari graphics characters, exactly as they appear on the screen.

II. Loading Instructions

To load Magniprint II+, just turn on your disk drive and insert the front of the Magniprint II+ disk with your printer and interface on. Then turn on your computer (with BASIC cartridge). Magniprint II+ will automatically load.

NOTE: XL and XE owners should NOT press the OPTION key. Simply put the Magniprint II+ disk in the drive, and turn the computer on, without pressing any buttons.

After the program has loaded, this menu is displayed:

1) Magniprint II+
2) Print All

---- CONVERSIONS ----

A) Micro-Painter
B) Micro Illustrator* See note below
C) Paint
D) Fun With Art
E) B/Graph
F) Graphic Master
G) Super Sketch
H) Strip Poker
I) Movie Maker (Background)
J) Graphics Magician
K) Atari Graphics Light Pen
L) Print Shop
M) Syngraph
N) ComputerEyes
O) Typesetter Sketch Pad Icon

Y) Printer= "Printer Brand Name" Z)= Spacing

Hit the appropriate letter or number for the option you want.

* Koala Pad and Atari Touch Tablet pictures **need no conversion.**

Hit the appropriate letter or number for the option you want.

* IMPORTANT: - Pictures from Koala Pad and Atari Touch Tablet (or other Micro Illustrator programs) need no conversion. They can be loaded directly into Magniprint II+, so just choose option 1 for these pictures.

III. Printer Selection

Before you begin printing pictures, you must set Magniprint II+ to work with the type of printer you have. If the correct printer is shown in item Y above, do nothing. If you need to change printers, hit the letter Y. Make sure you remove the write protect tab before selecting your printer. Now, whenever the Magniprint II+ disk is booted, it will automatically adjust itself to your printer. Be sure to replace the write protect tab after you've selected your printer.

Magniprint II+ will work with all Epson, Panasonic, CItoh, Nec, Gemini, Star, or other compatible printers. If your printer's brand name is not listed, pick the printer type which is compatible with your printer. For example, if your printer is a Star SG-10, pick the Gemini option.

SPACING SELECTION

This option controls the spacing of the dots on the printed picture. It can be used to compensate for your specific printers spacing, or to create special effects, such as a squashed or stretched picture.

Some new printers use a different spacing mode than earlier printers. Pictures printed with normal spacing on these printers look squashed and out of proportion. To fix this, remove the write protect tab from the Magniprint II+ disk, and press "S" to enter the Spacing mode. Now press "E" to turn the "EXPANDED" option on. Now the EXPANDED option will come on automatically each time you load your disk.

Using the spacing to create special effects can be tricky, so practice printing normal pictures first, to familiarize yourself with the basic printing procedure.

Other Spacing Options

Once you've had some experience printing pictures with normal spacing, you can use the other spacing options to achieve unique special effects.

There are two ways to set the spacing. The first way to do it is from the Main Magniprint II+ menu. Remove the write-protect tab, insert the disk into the drive, press "S" for spacing, and choose the selections you want. This method is a "permanent" method. Every time the Magniprint II+ disk is booted the program will automatically set the spacing as you specified. You must repeat this entire process to change the settings. This method is best for adjusting the spacing for normal looking print outs on your printer, so you don't have to make changes every time you boot the disk.

For experimenting with special effects, you can adjust the spacing while the picture you want to print is displayed on the screen. This method does not involve writing to the disk, so the changes will be gone when the disk is rebooted.

To change the spacing while viewing a screen, press the Space Bar. Press C for Change spacing. A small menu will appear. Select the spacing you want by pressing a number from 1 - 9. Spacing of 2 is normal spacing on most printers. Spacing of 2 in EXPANDED mode is normal on some newer printers. The "E" key toggles in and out of EXPANDED mode. The higher the number, the larger the space between the printed lines in the picture. More spaces between lines results in a more distorted picture.

Printing pictures normally on the page with a higher spacing will stretch the picture vertically. Printing pictures sideways with a higher spacing will stretch the picture horizontally. Try experimenting with different spacing, and observing the effects.

IV. PRINTING WITH MAGNIPRINT II+

Choosing item 1 from the main menu will load Magniprint II+. When the loading process is complete, turn the Magniprint II+ disk over and hit RETURN. The disk directory will show various sample picture files (these file names begin with "PIC").

The files SCSAVE.LST, SAVE012.LST, and GRDRAW.BAS are not pictures. They are subroutines entered with your own program, see Section VI for details. The files CHAR#.SET are alternate character sets. For more information on these files, see the section on text addition.

Enter the file name and press RETURN to load a picture. Entering "2" and hitting RETURN will show the files on a disk in drive 2.

IMPORTANT NOTE: - Be sure to type any extenders, or use * for a wild card. Some programs add .PIC to the end of the file name. Also, if you wish to load from drive 2, don't forget to enter D2:. Only pictures in MicroIllustrator or Magniprint II+ formats can be loaded directly into Magniprint II+. All other files must be converted first as explained in Section V. If BASIC is not installed, the screen may appear solid black after loading a picture. Try again with BASIC present. XL and XE owners must install BASIC by rebooting the Magniprint II+ disk WITHOUT touching the OPTION key).

A. GRAPHICS MODES 8 AND 7.5 (ANTIC E)

Almost all commercial graphics programs use one of these two modes.

For starters, load PICGR8.MP (you can type this as PICGR8.*). A geometric design, drawn in graphics mode 8 (actually graphics mode 8+16, where the +16 eliminates the text window) will appear. While viewing a graphics mode 8 screen, you can use the following

keyboard commands:

1. START - gives a quick print of your picture in a small size. This is useful to get an idea of how the picture looks before going to the Magniprint II+ printing routines, which will give a cleaner and more detailed image.

2. OPTION - gives a quick print of the picture in reverse black/white relationship. This is known as inverse printing. Inverse printing is a lot like a photographic negative.

If you hold down the C key while hitting START or OPTION, your picture will be centered. NOTE: Some printers may have trouble correctly centering a picture, so avoid this option if troubles occur.

3. SELECT - rotates colors in the picture for dramatic effects. Pictures can be saved with the altered colors at any time (see option 7).

4. N then 1 to 8 - sets the printer for normal (vertical) printing. After pressing N, you MUST press a number from 1 to 8, which indicates the print size desired. One (1) gives the smallest print size and Eight (8) gives the largest print size. Four cursors will appear on the screen, they outline the portion of the screen which can be printed. The entire screen can be printed in the smaller sizes. As the print size increases, the picture will be magnified on the printer, and only a portion of it will fit on a single page. You can change your size selection at any time by hitting N (or S, see item 5) and then another number from 1 to 8. The TAB key changes the cursor color for easier visibility.

The four cursors can be moved around the screen with the joystick and joystick button. When pressing the joystick button, the area of the screen to be printed can be enlarged or decreased. Hitting the ATARI key (the inverse key on XL and XE computers) takes you between coarse and fine cursor movement.

The RETURN key exits this mode and eliminates the cursors.

When you have chosen the desired print size and area of the screen to be printed, press the START key for normal printing

(graphics 8 & 7.5)or the OPTION key for inverse printing (graphics 8 only). Hold down the C key while selecting to center the picture.

If the picture is in graphics 7.5 (ANTIC E), you can pick the shades of grey the picture will be printed in. See the next section for details.

If you want to stop printing, hit the ESC key. The ESC key will abort the printing process and return you to the picture screen.

5. S then 1 to 8 - sets the printer for sideways printing, otherwise all instructions for normal printing (item 4) apply.

6. ESC key - changes the graphics mode. The Help screen (called by pressing the Space Bar) will always tell you what mode you are in. Sometimes a picture will look better in a different mode, so this feature is worth trying. While viewing a graphics mode 8 screen, pressing the ESC key will change a graphics 8 screen to a graphics 9 screen. Pressing the ESC key again will change the graphics 9 screen to a graphics E screen, and pressing ESC again will change it back to a graphics 8 screen. Graphics 8 screens can be printed in graphics E, and graphics E screens can be printed in graphics 8. This feature gives many different effects. See the next section for the features mode E lets you choose. It's left to the individual to discover the many effects this feature will allow.

7. Space Bar - allows you access to several other features of Magniprint II+. After pressing it, the following menu appears:

L LOAD ANOTHER SCREEN

S SAVE CURRENT SCREEN

T TOUCH-UP SCREEN

X ADD TEXT

E ENHANCED PRINTING OFF

P POSTER PRINTING

C CHANGE LINE SPACING

SPACE BAR RETURN TO PICTURE

a) L: allows you to delete the present screen.
It returns you to the disk directory screen, ready to load another picture.

NOTE: This load option can only be used with pictures in Magniprint II+ or Micro Illustrator formats. Picture files in other formats must be converted as explained in Section V.

b) S: allows you to save a screen.
After pressing the S key, you will be asked for the filename under which you wish to save the present picture. Place a disk with at least 66 free sectors in the disk drive, enter any legal Atari filename, and hit RETURN. Then press '1' to save it in Magniprint II+ format, or '2' to save it in Micro Illustrator format (used by Koala Pad and Atari Touch Tablet). If the Micro Illustrator format is chosen, the suffix .PIC will always be added to the filename, so the Micro Illustrator program will know it is a picture. Now you can use any picture available to Magniprint II+ with your Atari Touch Tablet or Koala Pad.

If you enter no file name but hit RETURN, you will exit this mode and be returned to the picture screen.

c) I: allows you to touch-up a screen.
To touch-up the picture presently on the screen, move the dot that appears at the top center of the screen with the joystick. The OPTION key will flash the cursor to make it easier to find. The ATARI or Inverse key speeds or slows the cursors movement.

Begin writing by pressing the joystick button. To erase, press E. To write again, press W.

When you are satisfied with the picture and ready to leave this mode, press the Space Bar.

d) X: allows you to insert text.

When this option is picked, Magniprint II+ will ask if you want to load an alternate character set, or use the standard Atari character set. To use the standard Atari character set, press the "N" key for "NO". To load an alternate character set, press the "Y" key for "YES". If you choose to use an alternate character set, the computer will ask for the file name. After the file name is entered, the picture is displayed on the screen.

Magniprint II+ is compatible with the standard character set file format (9 sectors) used by many commercial programs and magazine type-in character set editors. Five alternate character sets (designated by "CHAR 1-5.SET") are included on the back side of the Magniprint II+ disk.

To insert text on your graphics 8 or ANTIC mode E screens, move the cursor that appears at the top of the screen with the joystick. Pressing the joystick button moves the cursor vertically, a little bit at a time. When you press any key, the letter, number, or Atari graphics symbol will be entered into the picture at the cursor location.

To change the color of the screen text, and resulting shade (Antic mode E) or density (graphics mode 8) of the printed text, hit the TAB key. The cursor color will also change. In Antic mode E, the cursor color will match the text color. In graphics mode 8, the cursor color will not always match the text color. This happens because the screen colors are not user specified, but are the result of color artifacting.

To change the size of the text, hit the CTRL and TAB keys. Magniprint II+ will sound a tone. Then, pick the text size you want by pressing a number between 1 and 4. Size 1 is the smallest size, and size 4 is the largest. You can change the colors of any text size. For Antic mode E screens, the smallest text size may not always print clearly, or be legible on the screen.

You can switch back and forth between an alternate

character set and Atari's standard character set by hitting the ESC key. By loading different character sets, you can use any number of different characters on your picture. Once a character is written to your picture, the picture data beneath it is lost, so plan your work carefully. Saving your work often during text addition may save you time and grief.

Press the RETURN key to exit the text mode.

e) E: turns enhanced printing ON or OFF.

This key will allow darker, but slower, printing on some printers. Other printers always print graphics in the enhanced mode, so this feature may not always have an effect.

f) P: allows you to print poster size.

Poster size printing is one of the more exciting features of Magniprint II+. By combining the printouts from this feature, you can produce posters several feet in size.

There are three poster sizes, A is the smallest and C is the largest.

In graphics modes 8 & 9, printing will begin as soon as you select a size. To print in inverse black/white relationship, hold down the OPTION key while you make your size selection. In graphics mode 7.5 (ANTIC E), you can choose the shades of grey you want your poster to be printed in. See the next section for instructions on selecting shades.

In poster printing, an extra blank sheet of paper will be automatically skipped at the appropriate times between portions of the picture. When printing is complete, separate out the blank sheets then paste (or tape) the strips together to form the whole picture.

You can pause the printing process by pressing the "P" key. Pausing the printer will allow the printheads to coll during long printing runs, especially when printing the largest poster size. Press any key to continue printing.

NOTE: The functions "L", "X", and "T" are also useable while viewing a picture.

Graphics 7.5 (ANTIC E) Features

Graphics E (or 7.5) screens are 4 color screens used by most commercial drawing and painting programs. Magniprint II+ can print graphics E screens in four tone shading, and even lets you choose the shades you prefer.

Graphics E pictures will be displayed on the screen in the same shades of grey the printer will use. You can change the grey tone of each color register by using the 1, 2, 3, and 4 keys. Press START to print.

To abort the printing process, hit the ESC key. Magniprint II+ will return you to your grey scale picture.

If you don't want grey scaling, switch the picture to a graphics 8 screen prior to printing (see Section IV).

NOTE: NEC/C.ITOH printers cannot print grey scales in the smallest print size. If you use these printers and choose the smallest size, they will automatically be printed in graphics 8.

NOTE: Graphics 7.5 (ANTIC E) is the graphics mode used by most commercial drawing and painting programs. Any picture in any mode can be converted, to and printed in, Graphics 7.5, but some screens look best in the mode in which they were originaly created.

Color Printing

Color adds a dramatic touch to any picture. You can print any graphics 7.5 (ANTIC E) screen in up to four different colors with Magniprint II+. To do this, you will need colored ribbons or colored carbon paper. It takes several passes to get a complete picture.

First, load the picture you want to print in color. When it's on the screen, put the first color ribbon in your printer, and position the paper at the top of the page. If you are using colored carbon paper, tape the carbon paper onto the printer paper with the carbon side against the paper. Load and position the paper, with the uncoated side of the carbon paper facing the printhead. Do not turn off the printer. You may want to use a

pencil to make a small mark at the top of the page, or on the bottom of the previous page, to help you realign the paper on the next pass.

After the paper is loaded and positoned, you must set the grey shades. If you are printing in four different colors, set the first shade on the screen to the desired darkenss, and the other three to white. Only one shade of grey and the parts of the picture drawn in that shade will be on the screen. These are the parts that will be printed in that color. Press START to begin printing.

When the printer has finished and the picture is back on the screen, you're ready to begin the next pass. Change the ribbon (or carbon) and reposition the paper. Don't turn the printer off. Be sure to position the paper EXACTLY where it began at the last pass. If the alignment is off, each color will start at a diferent spot on the page. Then, set the color you have already finished to white, and the next color to the desired shade. Leave the remaining two white. You should see different parts of the picture on the screen. Press START.

Repeat this procedure for the last two shades. If the printer is accidetally turned off at any time, reboot the Magniprint II+ disk before attempting to finsh printing.

It's also possible to print a picture with two different colors of dots intermixed on the same area of the picture. For example, llet's say you want to print an apple with both red and green dots. First, set the apple on the screen to a light shade of green, and print it. When the printer is finished, set the same picture areas to a darker shade of grey, change the ribbon to red, and print it again. Each grey shade uses it's own dot pattern, so the different color dots will not overlay each other, instead, they will be mixed together.

This technique of adding color lends itself to an endless variety of special effects. You can create beautiful pictures simply by using a single colored ribbon and colored paper. Try printing a picture in four shades of blue on blue paper. Try using two shades of two colors, the same shade of four colors, or mix and match colors and shades on white or colored paper. For more unique effects, try deliberatly misaligning the paper for each color, changing the spacing for each color, or combining

misalginment with spacing options. Let your imagination be your guide!

You can get colored ribbons and paper from your local computer store. If you don't see exactly what you want on the shelf, ask a salesperson if they can be special ordered. If you cannot obtain these supplies locally, you can get colored ribbons, paper, and other supplies from:

Pixellite Computer Products
5221 Center St. Suite 205
Richmond, CA 94804
Outside California 1-800-643-0800
Inside California 1-800-237-3111
San Francisco Area 415-527-6400

B. GRAPHICS MODE 9

Graphics mode 9 is a special GTIA mode of the Atari computer which allows pictures to be produced in up to 16 shades of one color. Magniprint II+ has the unique ability to print these pictures with amazing reproduction quality using all 16 levels of shading. This is accomplished by varying the density of the dots within the rectangle patterns printed on the paper.

All of the functions used in graphics mode 8 work in graphics mode 9 except the following changes: You may want to load PICGR9.MP from the back of the Magniprint II+ disk and note these differences:

1. N then 1 - 5 - For normal printing you can only select sizes 1 through 5.

2. S then 1 - 4 - For sideways printing you can only select sizes 1 through 4.

3. T - The touch-up feature works a little different than in graphics mode 8. When the T key is depressed, a small rectangle will appear at the top of the screen. By pressing OPTION or SELECT, you can change the shade of the rectangle. By pressing the joystick button, you can draw in the shade of the rectangle.

4. X - You can use any of the 16 grey shades for text. Pressing the TAB key changes the text color. Keep pressing the TAB key to cylce through all 16 shades.

5. START or OPTION - These keys give you quick print of your screen. Just press START for normal printing or OPTION for inverse. This "quick print" feature will not give true shading, but it will give you a rough idea of how your picture will look.

C. GRAPHICS MODES 10 AND 11

These two graphics modes are special GTIA modes that have the same pixel size as graphics mode 9 but produce multicolor displays.

After loading one of these screens (PICGR10.MP or PICGR11.MP), you will find only the L key and ESC key function. The L key allows you to load a different picture and the ESC key switches both of these to a pseudo-graphics 9 screen which can then be printed with all the graphics 9 features.

If the ESC key is hit again, the picture will be changed to a graphics 8 screen and can be printed with all graphics 8 features.

D. GRAPHICS MODES 3 TO 7

These graphics modes produce various colored graphics pictures. Of course, you can't print colors, so Magniprint II+ will print all colors with black. It will print these modes in two sizes and allow normal or inverse printing.

To print in 1/2 page size in normal black/white relationship, press START. To print in inverse relationship, press OPTION. Hold SELECT down while you press either START or OPTION to print in a full page size.

No other keyboard commands work in these graphics modes except the L key which loads another picture.

E. GRAPHICS MODES 0, 1, and 2.

Magniprint II+ allows you to print all three text modes,

graphics 0, 1, and 2, with the full capabilities of either a graphics mode 8 or E screen. Graphics 0 screens (the normal boot-up mode of the Atari) are converted to graphics 8 screens. The two color text modes, graphics modes 1 and 2 are converted to graphics E screens, which allows the different colored characters to be printed in your choice of grey shades.

To print a graphics mode 0 screen refer to the section about graphics mode 8 pictures in this section. For graphics mode 1 or 2, refer to the section on graphics mode E.

NOTE:Be sure to use this feature with pure graphics modes, without text windows. Use modes 1+16 and 2+16, as the '+16' eliminates the small graphics mode 0 at the bottom.

V. Printing Pictures From Other Commercially Available Programs

Many popular commercially available programs allow you to easily draw pictures on your screen. The screens produced by most of these programs can be saved in Magniprint II+ format, then printed using all the features available for printing a graphics 8 or Antic E screen. No other program prints screens from as many different products as Magniprint II+.

The screens produced by some programs are not true graphics 8 screens, but use a special graphics mode, ANTIC mode E or graphics 7.5, with multi-color capabilities. Only Magniprint II+ will print excellent reproductions of these screens with 4 tone adjustable shading. Many times in graphics 8 you will find more accurate printing by using inverse printing as opposed to normal printing. Use the "quick print" feature to see which you prefer.

A. General Rules For Picture Conversion.

1. Pictures drawn in Micro Illustrator format, such as Koala Pad, Atari Touch Tablet, Gibson Light Pen, or Computers Eyes pictures saved in graphics tablet format need no conversion. You can use these pictures with Magniprint II+ just as they are.

2. When the prompt for the source or destination file name appears, hit RETURN without an entry to go back to the Main menu. Enter a 1 to see the disk directory in drive 1, or a 2 for a directory of drive 2. If you already know the file name, just enter it and then hit RETURN.

IMPORTANT NOTE: - Be sure you type any extenders, or just use * for a wild card. Some programs add .PIC to the end of the file name. Also, if you wish to load from drive 2, don't forget to enter D2:.

3. We recommend the source picture file created with your

graphics program be transferred to a blank formatted disk using the Atari DOS "C" or "O" options. Most commercial drawing programs also have their own load and save utilities which will allow the picture file to be saved to another disk. If you always use a copy of your picture files, you will be assured not to accidentally damage your original file.

This is especially important when the destination file is to be saved on the same disk as the source file.

4. After the picture is converted and saved in Magniprint II+ format, it will be displayed on the screen.

The START key sends you to the Magniprint II+ printing routines, ready for use, with the current picture.

The OPTION key re-saves the picture in Micro Illustrator format, writing over the just saved Magniprint II+ format picture. You can now use the picture with an Atari Touch Tablet or Koala Pad.

Any other key runs the conversion program for another picture transformation.

B. Micro-Painter, Fun With Art, Super Sketch, Atari Graphics Light Pen, Strip Poker, and Movie Maker (background screens only).

These ANTIC E pictures require 64 free sectors on the destination disk. To transform these files just follow the screen prompts.

NOTE: for Strip Poker. The picture files on the Strip Poker disk begin with "OP".

C. Koala Pad and Atari Touch Tablet (Micro Illustrator compressed format).

Koala Pad, Atari Touch Tablet, Gibson Light Pen, and other pictures drawn in Micro Illustrator format need no conversion. They can be used exactly as they are. All files can be saved in either Micro Illustrator or Magniprint format. For more information on saving files, see section IV, page 6.

If, for some reason, you wish to transform these files, just use option B. These files require 66 free sectors on the destination disk. Again, just follow the screen prompts to transform them.

D. Paint.

When the Paint conversion option is run, the picture file names shown are from a normal directory on the disk. Some early versions of Paint use a hidden directory. To see these files, type a 1, then hold down the OPTION key and press RETURN at the same time. This will show you the correct picture files from the hidden directory.

We suggest saving a copy of the Paint picture file on a blank formatted disk using Paints' load and save routines before proceeding with the transformation process. Paint requires 66 free sectors for the transformed file, which will be saved with a normal directory location.

E. Print Shop.

First you will be asked to insert a disk with saved Print Shop picture files (graphics 8). You cannot use the Print Shop Master Disk files, but you can use saved pictures, or the separate picture file data disk, "Print Shop Graphics Library".

Insert the disk with the saved picture files and hit RETURN. A picture file directory, with a file number and the type of picture (small or large) will be displayed. A "Small" picture is from Print Shop's Graphic Editor. A "Large" picture is a Screen Magic picture. CTRL-1 will pause the scrolling, so you can read the filenames and numbers.

Enter the file number, NOT the file name, to begin the transformation process.

F. Graphics Magician.

To transform one of the compressed files from Graphics Magician Picture Painter, follow the prompt to insert the back side of the Magniprint II+ Master disk in your drive. The next prompt asks for the disk with the picture files to be transformed, and the conversion process will continue as usual. Reboot the front of the Magniprint II+ disk to exit this mode.

G. ComputerEyes

Pictures saved with ComputerEyes Touch Tablet format need no conversion, and can be loaded directly with Magniprint II+. Other Computer Eyes pictures need conversion.

Magniprint II+ will print your Computer Eyes pictures with 4 tone shading that looks better on paper than it does on your screen! After entering the source and destinations file names, the computer will ask what type of Computer Eyes picture it is. If the picture is a normal, 4, or 8 level capture picture, press the "N" key. If the picture is a high or low contrast capture picture, press the "C" key. If it's a graphics 9 capture picture, press the "G" key.

H. TYPESETTER Sketch Pad Icon.

TYPESETTER (Xlent Software) alows you to create a graphics and text layout in a size larger than a normal graphics screen. Since TYPESETTER layout pages are larger than a standard screen, they must be copied to the "Sketch Pad" mode of TYPESETTER before they can be converted into Magniprint II+ format.

First, using TYPESETTER, convert the area of the screen you will be working with to Sketch Pad mode. Follow the instructions in your TYPESETTER manual to copy the screen to Sketch Pad. Then save resulting Sketch Pad screen. Once agian, follow the instructions provided in your TYPESETTER manual. The saved screen

will be a 15 sector file. These 15 sector files are the only files that can be used with Magniprint II+.

PAGE DESIGNER and RUBBER STAMP (both from Xlent) graphics can also be used. Load them into TYPESETTER, following the instructions in the TYPESETTER manual, then proceede as above.

I. Others.

Other graphics programs are also compatible with Magniprint II+. First, check to see if the program you used to create the picture file is listed above. If not, then try to load it directly into Magniprint II+. If the results are not satisfactory, use the various conversion options to find the one that will work with your file.

A graphics program written in BASIC, or any program that allows you to display the pictures in your own program can be converted to Magniprint II+ format. Follow the instructions in the next chapter, "Printing Pictures You Have Created".

ANTIC magazine's REMBRANT pictures can by used simply by saving them in MicroPainter or Koala Pad format, using REMBRANT's finished utility mode.

VI. Printing Pictures You Have Created

If you have written a program that produces a graphics or text screen, you can save the screen in Magniprint II+ format, and then print it. You can also use this process to convert pictures that are created with, or displayed by, BASIC programs.

A. Graphics Modes 3, 4, 5, 6, 7, 8, 9, 10, 11, and E.

First, load your screen generating program and find the correct place in the program just after the picture is drawn. To find this spot, run the program and hit the BREAK key after the picture is drawn. Note the line number where the program has stopped. This line is probably within a timing loop or in a loop waiting for your input. In either case, remove the loop and put in the line:

```
GRMODE=X:GOTO 30000
```

X is the graphics mode the picture was drawn in. Normally, adding 16 to graphics modes 3 to 8 (eliminating the text window) will produce better results with Magniprint II+. For Antic mode E pictures, use X=14. Next, insert the back of the Magniprint II+ Master disk in your disk drive and type:

```
ENTER "D:SCSAVE.LST"
```

Screen Saver will be joined to your program. Just make sure your program doesn't use the line numbers 30000 to 30030. Next, put a disk in your drive which has at least 66 free sectors to store your picture file.

When the program is run, the screen will be saved to the disk as PICTURE.MP. You can change this name by changing the file name in line 30000.

As an example, from the back of the Magniprint II+ disk, run the program GR9DRAW.BAS. This is a short program that draws some shapes in graphics mode 9. Hit the BREAK key, and replace line 80 with the line:

```
80 GRMODE=9:GOTO 30000
```

Now, enter the program D:SCSAVE.LST from the back of the Magniprint II+ disk, then place a disk in drive 1 to receive the picture file. Now run the program. If you did everything right, you can use this new picture file called PICTURE.MP with Magniprint II+.

B. Graphics Modes 0, 1, & 2 (Text Modes).

Atari's three text modes can be converted to Magniprint II+ format, and printed with all Magniprint II+'s capabilities. These modes are even easier to convert than the other graphics modes!

Begin by finding the appropriate place to insert the line "GOTO 30000", as described in the previous section. The value for GRMODE will be assigned automatically, you need do nothing to that variable.

Place the back of the Magniprint II+ disk in drive 1 and type:

ENTER "D:SAVE012".LST"

This adds the subroutine SAVE012.LST to your program.

Now run your program. The text screen will be displayed, and saved to drive 1 as "PICTURE.MP" in Magniprint II+ format. You can change this name by changing the filename in line 30002.

You can load a Magniprint II+ picture from your BASIC program by using the same SCSAVE.LST routine. First, set RW=4 in line 30000. When you want to load a Magniprint II+ picture, type GOTO 30000. The picture whose file name appears in line 30000 is loaded. Once it is loaded, you can continue on in your BASIC program, or hold the picture on the screen by removing the first "REM" in line 30008.

VII. PRINT ALL

This program will print your programs or files just the same as they appear on your screen, including inverse and Atari graphics characters.

First, you must LIST (not SAVE) your program to a disk. To accomplish this, LOAD your program, then LIST it using another file name:

```
LIST "D:filename.LST"
```

Next, boot the Magniprint II+ Master disk and select item 2, "Print All" from the menu. When Print All has been loaded, follow the screen prompts beginning with the file name of your listed program.

Hit RETURN for a disk directory of drive 1. For a directory of drive 2, hit 2 then RETURN. After this, enter your file name and hit RETURN. The screen will ask if you would like it printed Compressed or Normal. Hit the N key for Normal, or the C key for Compressed.

APPENDIX A
TECHNICAL INFORMATION

Magniprint II+ stores picture files in the following format:

1 byte	Graphics Mode
9 bytes	Color Registers 704-712

The display list information and actual picture data follow this data.

For B/Graph and Graphic Master, the graphics mode used is 24. For other programs, a 14 is used to trigger a graphics 7.5 (Antic mode E) screen.

For ComputerEyes pictures, a 1 is placed in the color register 704 to select the default ComputerEyes gray shades.

APPENDIX B
PROBLEMS

Magniprint II+ sends complicated signals to the printer to complete its picture files. If something goes wrong and the picture will not print correctly, turn the printer off then on again, AND reboot your Magniprint II+ Master disk. Never turn the printer off without rebooting since the printer will have lost all its special codes. If you still have problems, check the dip switch settings of your printer to conform to the normal settings in your printer manual.

Here are some specific problems and solutions.

1. Screen comes up black or a solid color after loading.

   The BASIC cartridge is not inserted (or BASIC is out on an XL or XE). Atari 400 and 800 users should insert the BASIC cartridge and reboot the disk. XL and XE owners should reboot the disk, WITHOUT TOUCHING the OPTION key. Or you can hit the Space Bar twice. This allows Magniprint II+ to work without BASIC. BASIC is actually required only for certain picture conversions, but we suggest you always use it to avoid confusion.

   NOTE: Magniprint II+ runs at the same speed with or without BASIC.

2. Improper printing.

   There are several possibilities here.

   A) The Magniprint II+ printer option is not set correctly. Reboot the Magniprint II+ disk, and see which printer name is displayed. See Section III for printer settings.

B) You are using an early version of the APE-FACE interface. APE-FACE had problems with their early interfaces. They have offered to upgrade them with a working version, so contact them for assistance.

NOTE: To tell which version you have, unfasten the four screws which hold the box together and look at the chips. If you find three chips, and one of them has NEC printed on it, you have the early model and should contact Digital Devices for an exchange.

C) You are using the centering option. There are certain printers that don't center a picture properly, if you have problems, then avoid this option.

D) Your dip switches are set incorrectly, check the settings according to your manual.

E) If the picture looks squashed, stretched, or out of proportion, or if it seems to be printing on top of itself, you may need to set the Spacing option. See section III for instructions.

F) Your printer, interface or computer may have a problem. We suggest you try the programs on a friends system to see if they functions properly there.

3. Disk won't load or files are missing.

It is possible that your disk was damaged or erased in shipment. This is unlikely, but if you think that this has occurred, then try loading the program on a friends computer and drive. If it still won't load, then follow the warranty instructions for a free replacement.

4. If all else fails, call or write to Alpha Systems, and ask for the Technical Assistance Department.

APPENDIX C

REFERENCE CARD

START - Quick Print

OPTION - Quick print in inverse
(Hold C down at same time to center)

SELECT - Color Rotation

N - Normal Printing
Type N then a size
Graphics 8&E: 1-8
Graphics 9: 1-4
Then hit START for normal or OPTION for inverse (not Graphics E) to print
(Hold down C to center)
ESC aborts the print out.
TAB changes the cursor shade
RETURN exits this mode

S - Sideways Printing
Same as above

ESC - Converts Graphics 8, 7.5 (E), & 9 screens (when the picture is displayed on the screen)
- Aborts the print out and returns to Magniprint II+ (when printing a picture)

SPACE BAR & L - Load A New Screen

SPACE BAR & T - Touch-Up

OPTION - to flash cursor

Joystick Trigger - to draw

E - to enter erase mode

D - return to draw mode

RETURN - to exit Touch-Up mode

SPACE BAR & X - Insert Text

(Graphics modes 8 and 7.5)

Joystick - to position cursor

Joystick Trigger - fine vertical motion

TAB - change cursor shades

CTRL-TAB then 1, 2, 3, or 4 - Change text size

RETURN - exit this mode

SPACE BAR & P - Poster Printing

Graphics 7.5 - Allows shade selection. After selection, press START to print

Other Graphic Modes - START to print normally

- OPTION to print inverse

P - Pauses printing

SPACE BAR & C - Change spacing

Spacing 1-9

Spacing of 2 is normal on most printers

E - toggles in and out of EXPANDED mode. Spacing 2 in EXPANDED is normal on some newer printers

Space Bar - to exit

LIMITED WARRANTY

Alpha Systems warrants the original purchaser of this computer software product that the recording medium on which the software programs are recorded will be free from defects in materials and workmanship for ninety days from the date of purchase. Defective media returned by the purchaser during that ninety day period will be replaced without charge, provided that the returned media have not been subjected to misuse, damage, or excessive wear.

Following the initial ninety day warranty period, defective media will be replaced for a replacement fee of $6.50.

Defective media should be r

ALPHA SYSTEMS
1012 SKYLAND DRIVE
MACEDONIA, OH. 44056

in protective packaging accompanied by: (1) a brief statement describing the defect; (2) a $6.50 check or money order (if beyond the ninety day warranty period); (3) your return address; (4) the problem disk.

What is Not Covered by this Warranty

This warranty does not apply to the software programs themselves. the programs are provided "as is".

This warranty is in lieu of all other warranties, whether oral or written, express or implied. Any implied warranties, including imputed warranties of merchantability and fitness for a particular purpose, are limited in duration to ninety days from the date of purchase. Alpha Systems shall not be liable for incidental or consequential damage for breach of any express or implied warranty.

The provisions of the foregoing warranty are subject to the laws of the state in which the disk is purchased. Such laws may broaden the warranty protection available to the purchaser of the disk.

Tell Us What You Think

We at Alpha Systems are sincerely interested in bringing you the best possible products at the lowest possible prices. Please write us if you experience any difficulties with our products, or have any comments or ideas for improvements. We will do our best to make our products better meet your needs. When you write, please enclose the following: 1) Your name, address, and phone number. 2) Your comments, or a description of your problem. 3) A description of your system. 4) If you are reporting a problem, please also include a description of what you were doing when the problem occurred, any printouts or other output showing the problem if possible, and any suggestions you may have regarding the cause and solution.

Magniprint II is a versatile and powerful program which will meet most, if not all your printout needs. The price is hard to beat. Its power is obvious, its features many.
– ANALOG MAGAZINE

The plus is in the shading — now Magniprint lets you print the highest quality reproductions of your screens available anywhere. It lets you choose the shading you want for the different colors and shades on the screen. It allows you to adjust the shades while your picture is displayed on the screen, so what you see is what you get. Magniprint prints the shades on your standard printer and paper by using specially designed dot patterns, yielding better looking output than you get on your screen.

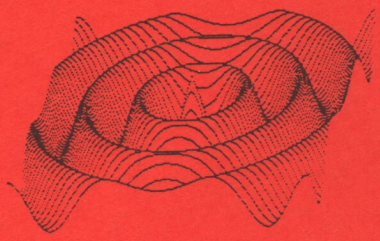
This new feature is perfect for printing pictures from Koala Pad, Touch Tablet, Micro Illustrator, and others. It will amaze you when you print pictures from Computer Eyes or Strip Poker.

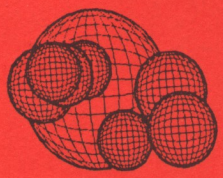
PRINT YOUR ATARI GRAPHICS LIKE YOU'VE NEVER SEEN BEFORE!

Magniprint II is the most powerful print utility available for your computer. It is the only software that can accurately print GTIA modes with 16 shades.

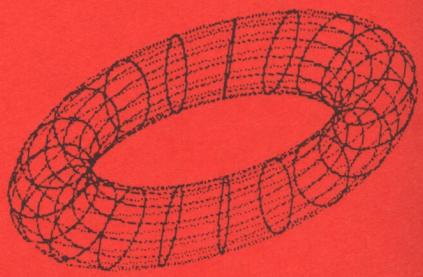
WITH MAGNIPRINT II YOU CAN:

- Print all graphics modes
- Blow up your pictures to wall-sized posters
- Centering option lets you center the picture on the page
- Print in normal shades or in inverse (like a photographic negative)
- Shrink pictures down to 1/8th page size
- Choose up to 19 different sizes
- Use NEC, CITOH, EPSON or Gemini printers with graphics (or compatible printers such as Panasonic, etc.) 850 interface or equivalent required
- Use your own graphics creations or those created with Graphics Master, Micropainter, SynGraph, Print Shop, Fun With Art, Super Sketch, Atari Graphics Light Pen, B/Graph, Koala Pad, Atari Touch Tablet, Paint, Strip Poker, Graphics Magician, and others
- Do amazing graphics with your standard printer and paper
- Add text to your pictures, in regular or special character sets
- Allows you to change graphics modes for special effects
- Print the whole screen or any selected portion of the screen in multiple sizes
- Print GTIA modes 9, 10, 11 with 16 different shades
- A special quick print feature lets you have a quick preview of the picture
- HELP screens for easy use
- Posters are printed along continuous sheets of paper which are attached together when done
- Touch-up mode lets you change your pictures with your joystick





Actually printed with Magniprint



BONUS: With every Magniprint order get "PRINTALL" FREE.

FREE: With any Magniprint order — **PRINTALL.** Allows you to print your programs or files just as they appear on the screen. Clearly prints all graphic symbols, even **INVERSE** and control characters.

```
10 REM  PRINTALL SAMPLE
        PRINTOUT
20 REM Print ALL
   characters even
   INVERSE and graphics
30 REM [RE][→][↑][↓][←][K] -- Make
   programs more readable
   and easy to fix.
```